

RDT Series

Digital Temperature Controllers



Description

Ranco® RDT Series Digital Controllers are a new generation of microprocessor-based, multi-function, configurable temperature controls for commercial refrigeration applications. With heat and cool modes, three available models enable full control of 'static' or 'ventilated' refrigeration units working at positive and negative temperatures. The RDT Series offers control of the compressor, defrost function, evaporator fan and alarm management, with component/function control varying by model. The units come with a software keypad lock, a copy card TTL port, panel mounting brackets and NTC temperature sensor probes.

Features and Benefits

- Available 230V and 120V versions
- Single or double sensors
- °C and °F
- 0.1° control accuracy
- Easy to read touch display
- Configurable digital inputs
- Individual setpoints, differentials, probe calibration and time delays
- Intuitive programming menus
- Diagnostics and self-testing
- Available 'off-cycle' and 'active defrost' control

Applications

- Commercial freezing and refrigerating display cases
- Commercial freezing and refrigerating compartments
- Commercial coolers and chillers
- Commercial plug-in refrigerated counters

2 Year
Limited
Warranty

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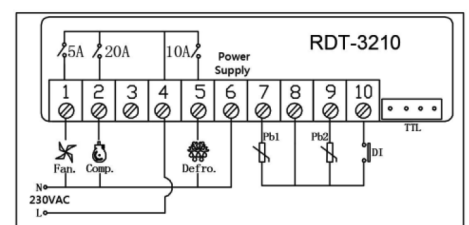
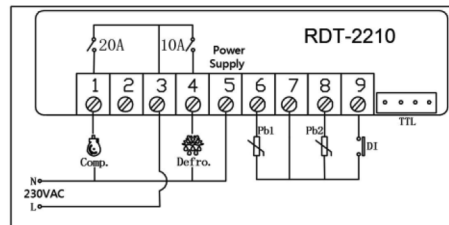
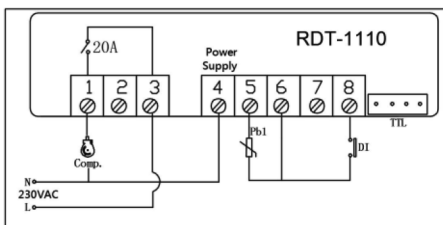
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Specifications

Part Number	Description	Heat And Cool Control	Dimensions	Temperature Range °C (°F)	Relays	Input Sensor Probes	Compressor Relay Rating	Off-Cycle Defrost Frequency/Duration	Defrost Relay Rating	Fan Relay Rating
RDT-1110	Digital Temperature Controller	Compressor Off-cycle defrost Alarms	Front panel: 85x35 mm, depth 63 mm Display: 48x30 mm Panel mounting: 71x29 mm drilling template	-50°C to 150°C (-58°F to 302°F)	Compressor (20A)	1	20 Amp	250 h / 250 min	N/A	N/A
RDT-2210		Compressor Active defrost cycle Alarms			Compressor (20A) Active defrost (10A)	2			10 Amp	N/A
RDT-3210		Compressor Active defrost cycle Evaporator fan Alarms			Compressor (20A) Active defrost (10A) Evaporator fan (5A)	2			10 Amp	5 Amp

Part Number	Electrical Rating	Input Properties	Digital Output Properties	Mechanical Properties	Operating Temperature Range	Power Consumption
RDT-1110 RDT-2210 RDT-3210	230V AC 50/60 HZ	NTC probe: -50°C to 150°C (-58°F to 302°F) Accuracy: NTC (-50°C to 70°C) +/- 1°C (-58°F to 158°F) +/- 1° Resolution: 0.1°	Compressor relay: 2Hp 20A max 240V AC Defrost relay: 1/2 Hp 10A max 250V AC Fan relay: 5A max 250V AC	Casing: PC+ABS resin casing, polycarbonate window Terminals: Screw / disconnectable terminals for 2.5 mm ² cross-sectional cable area Connector: TTL for copy card Humidity: Use / storage 10% to 90% RH (non-condensing) NTC probe length: 2 meter (79")	Use: -5°C to 50°C (23°F to 122°F) Storage: -30°C to 80°C (-22°F to 176°F)	4.5 W max

Wiring Diagrams



Wiring Diagram Legend

Pb1: Input sensor probe 1

Pb2: Input sensor probe 2

DI: Digital input

TTL: Port for copy card